

FILE 'USPAT' ENTERED AT 10:06:26 ON 06 MAR 97

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* * * * *
*           W E L C O M E   T O   T H E           *
*           U . S .   P A T E N T   T E X T   F I L E   *
* * * * *
```

=> s carbon(2a)(flux or flow)

374185 CARBON

69049 FLUX

721465 FLOW

L1 2097 CARBON(2A)(FLUX OR FLOW)

=> s l1(6a)(modif? or alter? or increas?)

1106884 MODIF?

1007221 ALTER?

1183956 INCREAS?

L2 83 L1(6A)(MODIF? OR ALTER? OR INCREAS?)

=> s (phosphoenol pyruvate or pep)(4a)(suppl#### or availab?)

118 PHOSPHOENOL

3575 PYRUVATE

110 PHOSPHOENOL PYRUVATE

(PHOSPHOENOL(W) PYRUVATE)

1281 PEP

SEARCH ENDED BY USER

=> s (phosphoenol pyruvate or pep or phosphoenolpyruvate or phosho enol pyruvate)(4a)(suppl#### or availab?)

118 PHOSPHOENOL

3575 PYRUVATE

110 PHOSPHOENOL PYRUVATE

(PHOSPHOENOL(W) PYRUVATE)

1281 PEP

195 PHOSPHOENOLPYRUVATE

6 PHOSHO

4353 ENOL

3575 PYRUVATE

0 PHOSHO ENOL PYRUVATE

(PHOSHO(W) ENOL(W) PYRUVATE)

SEARCH ENDED BY USER

=> s (phosphoenol pyruvate or pep or phosphoenolpyruvate or phospho enol pyruvate)(4a)(suppl#### or availab?)

118 PHOSPHOENOL

3575 PYRUVATE

110 PHOSPHOENOL PYRUVATE  
    (PHOSPHOENOL (W) PYRUVATE)  
1281 PEP  
    195 PHOSPHOENOLPYRUVATE  
2334 PHOSPHO  
4353 ENOL  
3575 PYRUVATE  
    17 PHOSPHO ENOL PYRUVATE  
        (PHOSPHO (W) ENOL (W) PYRUVATE)  
  
777853 SUPPL####  
694450 AVAILAB?

L3               75 (PHOSPHOENOL PYRUVATE OR PEP OR PHOSPHOENOLPYRUVATE OR PHOS  
PHO

    ENOL PYRUVATE) (4A) (SUPPL#### OR AVAILAB?)

=> s 12 and 13

L4               0 L2 AND L3

=> s phosphotransferase# or phospho transferase#

    666 PHOSPHOTRANSFERASE#

    2334 PHOSPHO

    3278 TRANSFERASE#

    8 PHOSPHO TRANSFERASE#

        (PHOSPHO (W) TRANSFERASE#)

L5               673 PHOSPHOTRANSFERASE# OR PHOSPHO TRANSFERASE#

=> s (12 or 13) (p) 15

L6               1 (L2 OR L3) (P) L5

=> d cit,ab,kwic

1. 5,602,030, Feb. 11, 1997, Recombinant glucose uptake system; Lonnie  
O. Ingrahm, et al., 435/252.3, 69.1, 194, 252.33, 254.1, 254.11, 255.1,  
255.2, 320.1 [IMAGE AVAILABLE]

US PAT NO:       5,602,030 [IMAGE AVAILABLE]

L6: 1 of 1

#### ABSTRACT:

Recombinant organisms are disclosed that contain a pathway for glucose uptake other than the pathway normally utilized by the host cell. In particular, the host cell is one in which glucose transport into the cell normally is coupled to PEP production. This host cell is transformed so that it uses an alternative pathway for glucose transport that is not coupled to PEP production. In a preferred embodiment, the host cell is a bacterium other than *Z. mobilis* that has been transformed to contain the *glf* and *glk* genes of *Z. mobilis*. By uncoupling glucose transport into the cell from PEP utilization, more PEP is produced for synthesis of products of commercial importance from a given quantity of biomass supplied to the host cells.

# SUMMARY:

BSUM(4)

Phosphoenol . . . transport of glucose into the cell. Glucose is phosphorylated in a concerted process by a multiprotein, -membrane-bound complex termed the \*\*phosphotransferase\*\* system (PTS). In this process, PEP serves as the source of a high energy phosphate which is ultimately attached to. . . of the PEP produced is obligately consumed to provide energy for glucose uptake. This reduces by 50% the amount of \*\*PEP\*\* \*\*available\*\* as a source of carbon skeletons for biosynthesis, severely impacting the efficiency of conversion into many desired commercial products.

=> s (l2 or l3) and l5

L7 1 (L2 OR L3) AND L5

=> s (l2 or l3) and (aromatic or shikimate)

159562 AROMATIC

47 SHIKIMATE

L8 55 (L2 OR L3) AND (AROMATIC OR SHIKIMATE)

=> s (l2 or l3) (p) (aromatic or shikimate)

159562 AROMATIC

47 SHIKIMATE

L9 4 (L2 OR L3) (P) (AROMATIC OR SHIKIMATE)

=> d cit,ab,kwic

1. 5,602,030, Feb. 11, 1997, Recombinant glucose uptake system; Lonnie O. Ingrahm, et al., 435/252.3, 69.1, 194, 252.33, 254.1, 254.11, 255.1, 255.2, 320.1 [IMAGE AVAILABLE]

US PAT NO: 5,602,030 [IMAGE AVAILABLE]

L9: 1 of 4

## ABSTRACT:

Recombinant organisms are disclosed that contain a pathway for glucose uptake other than the pathway normally utilized by the host cell. In particular, the host cell is one in which glucose transport into the cell normally is coupled to PEP production. This host cell is transformed so that it uses an alternative pathway for glucose transport that is not coupled to PEP production. In a preferred embodiment, the host cell is a bacterium other than *Z. mobilis* that has been transformed to contain the *glf* and *glk* genes of *Z. mobilis*. By uncoupling glucose transport into the cell from PEP utilization, more PEP is produced for synthesis of products of commercial importance from a given quantity of biomass supplied to the host cells.

## SUMMARY:

BSUM(4)

Phosphoenol . . . compounds of commercial importance. For example, an equimolar amount PEP is combined with erythrose-4-phosphate to provide the carbon skeleton for **\*\*aromatic\*\*** products such as tyrosine, phenylalanine, tryptophan, and some vitamins among other compounds. PEP also is combined with carbon dioxide to. . . of the PEP produced is obligately consumed to provide energy for glucose uptake. This reduces by 50% the amount of **\*\*PEP\*\*** **\*\*available\*\*** as a source of carbon skeletons for biosynthesis, severely impacting the efficiency of conversion into many desired commercial products.

=> d cit,ab 18 1-2

1. 5,602,030, Feb. 11, 1997, Recombinant glucose uptake system; Lonnie O. Ingrahm, et al., 435/252.3, 69.1, 194, 252.33, 254.1, 254.11, 255.1, 255.2, 320.1 [IMAGE AVAILABLE]

US PAT NO: 5,602,030 [IMAGE AVAILABLE]

L8: 1 of 55

ABSTRACT:

Recombinant organisms are disclosed that contain a pathway for glucose uptake other than the pathway normally utilized by the host cell. In particular, the host cell is one in which glucose transport into the cell normally is coupled to PEP production. This host cell is transformed so that it uses an alternative pathway for glucose transport that is not coupled to PEP production. In a preferred embodiment, the host cell is a bacterium other than *Z. mobilis* that has been transformed to contain the *glf* and *glk* genes of *Z. mobilis*. By uncoupling glucose transport into the cell from PEP utilization, more PEP is produced for synthesis of products of commercial importance from a given quantity of biomass supplied to the host cells.

2. 5,556,517, Sep. 17, 1996, Solar process for making fullerenes; Richard E. Smalley, 204/157.47; 423/445B, DIG.19 [IMAGE AVAILABLE]

US PAT NO: 5,556,517 [IMAGE AVAILABLE]

L8: 2 of 55

ABSTRACT:

This invention provides an improved process and apparatus for making fullerenes by vaporizing carbon and conducting the resulting carbon vapor to a dark zone for fullerene growth and annealing. In one embodiment concentrated solar energy is used to vaporize carbon. In a further embodiment, concentrated solar energy may be used to improve fullerene yields by vaporizing carbon and further to prevent carbon cluster formation until the carbon vapor passes into a dark zone for fullerene growth and annealing. The invention provides an improvement to increase

the yield of any known process wherein carbon is vaporized under high light conditions, the improvement comprising providing a dark zone for fullerene growth and annealing.

=> logoff y

U.S. Patent & Trademark Office LOGOFF AT 10:41:13 ON 06 MAR 97

\* \* \* \* \* STN Columbus \* \* \* \* \*

\*CEDB - File is no longer available

\* The files listed above are temporarily unavailable.

FILE 'HOME' ENTERED AT 12:19:06 ON 06 MAR 97

=> fil .bec

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.15

0.15

FILES 'MEDLINE, SCISEARCH, LIFESCI, BIOTECHDS, BIOSIS, EMBASE, HCAPLUS, NTIS,  
WPIDS' ENTERED AT 12:19:25 ON 06 MAR 97

ALL COPYRIGHTS AND RESTRICTIONS APPLY. SEE HELP USAGETERMS FOR DETAILS.

9 FILES IN THE FILE LIST

=> s carbon(2a)(flux or flow)

FILE 'MEDLINE'

142777 CARBON

13953 FLUX

200857 FLOW

L1 397 CARBON(2A) (FLUX OR FLOW)

FILE 'SCISEARCH'

152532 CARBON

55493 FLUX

268213 FLOW

L2 1199 CARBON(2A) (FLUX OR FLOW)

FILE 'LIFESCI'

26230 CARBON

6170 FLUX

25689 FLOW

L3 504 CARBON(2A) (FLUX OR FLOW)

FILE 'BIOTECHDS'

6681 CARBON

863 FLUX

8601 FLOW

L4 131 CARBON(2A) (FLUX OR FLOW)

FILE 'BIOSIS'

170041 CARBON

28079 FLUX

219663 FLOW

L5 1988 CARBON(2A) (FLUX OR FLOW)

FILE 'EMBASE'

79915 CARBON

16189 FLUX

207807 FLOW

L6 491 CARBON(2A) (FLUX OR FLOW)

FILE 'HCAPLUS'

590965 CARBON

136678 FLUX

413601 FLOW

L7 2843 CARBON(2A) (FLUX OR FLOW)

FILE 'NTIS'

62579 CARBON

32590 FLUX

146992 FLOW

L8 208 CARBON(2A) (FLUX OR FLOW)

FILE 'WPIDS'

204337 CARBON

51274 FLUX

415399 FLOW

L9 737 CARBON(2A) (FLUX OR FLOW)

TOTAL FOR ALL FILES

L10 8498 CARBON(2A) (FLUX OR FLOW)

=> s l10(6a) (modif? or alter? or increas?)

FILE 'MEDLINE'

192062 MODIF?

352520 ALTER?

1058722 INCREAS?

L11 49 L1 (6A) (MODIF? OR ALTER? OR INCREAS?)

FILE 'SCISEARCH'

206976 MODIF?

267294 ALTER?

740015 INCREAS?

L12 63 L2 (6A) (MODIF? OR ALTER? OR INCREAS?)

FILE 'LIFESCI'

51490 MODIF?

89602 ALTER?

262275 INCREAS?

L13 37 L3 (6A) (MODIF? OR ALTER? OR INCREAS?)

FILE 'BIOTECHDS'

15484 MODIF?

10889 ALTER?

35796 INCREAS?

L14 23 L4 (6A) (MODIF? OR ALTER? OR INCREAS?)

FILE 'BIOSIS'

219266 MODIF?

383692 ALTER?

1250499 INCREAS?

L15 101 L5 (6A) (MODIF? OR ALTER? OR INCREAS?)

FILE 'EMBASE'

183274 MODIF?

349369 ALTER?

1056754 INCREAS?

L16 48 L6 (6A) (MODIF? OR ALTER? OR INCREAS?)

FILE 'HCAPLUS'

469458 MODIF?

425226 ALTER?

2125658 INCREAS?

L17 79 L7 (6A) (MODIF? OR ALTER? OR INCREAS?)

FILE 'NTIS'

85875 MODIF?

76946 ALTER?

152960 INCREAS?

L18 8 L8 (6A) (MODIF? OR ALTER? OR INCREAS?)

FILE 'WPIDS'

141137 MODIF?

260656 ALTER?



759717 INCREAS?

L19 17 L9 (6A) (MODIF? OR ALTER? OR INCREAS?)

TOTAL FOR ALL FILES

L20 425 L10(6A) (MODIF? OR ALTER? OR INCREAS?)

=> s (phosphoenolpyruvate or (phospho enol or phosphoenol) (w)pyruvate or  
pep).(4a) (suppl#### or availab?)

FILE 'MEDLINE'

4806 PHOSPHOENOLPYRUVATE

1982 PHOSPHO

461 ENOL

47 PHOSPHO ENOL

(PHOSPHO (W) ENOL)

183 PHOSPHOENOL

18255 PYRUVATE

2045 PEP

218890 SUPPL####

150001 AVAILAB?

L21 16 (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOENOL) (W) PY  
RUVATE OR PEP) (4A) (SUPPL#### OR AVAILAB?)

FILE 'SCISEARCH'

3693 PHOSPHOENOLPYRUVATE

1236 PHOSPHO

4129 ENOL

38 PHOSPHO ENOL

(PHOSPHO (W) ENOL)

150 PHOSPHOENOL

11650 PYRUVATE

1379 PEP

51734 SUPPL####

131920 AVAILAB?

L22 19 (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOENOL) (W) PY  
RUVATE OR PEP) (4A) (SUPPL#### OR AVAILAB?)

FILE 'LIFESCI'

1429 PHOSPHOENOLPYRUVATE

662 "PHOSPHO"

171 "ENOL"

13 PHOSPHO ENOL

("PHOSPHO" (W) "ENOL")

90 PHOSPHOENOL

3941 PYRUVATE

538 PEP

12876 SUPPL####

45369 AVAILAB?

L23 7 (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOENOL) (W) PY  
RUVATE OR PEP) (4A) (SUPPL#### OR AVAILAB?)

FILE 'BIOTECHDS'

234 PHOSPHOENOLPYRUVATE

126 PHOSPHO

104 ENOL

2 PHOSPHO ENOL

(PHOSPHO (W) ENOL)

30 PHOSPHOENOL

1121 PYRUVATE

112 PEP

4721 SUPPL####

4895 AVAILAB?

L24 5 (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOENOL) (W) PY  
RUVATE OR PEP) (4A) (SUPPL#### OR AVAILAB?)

FILE 'BIOSIS'

5803 PHOSPHOENOLPYRUVATE

54584 PHOSPHO

1611 ENOL

137 PHOSPHO ENOL

(PHOSPHO (W) ENOL)

3552 PHOSPHOENOL

28426 PYRUVATE

2775 PEP

67835 SUPPL####

156870 AVAILAB?

L25 32 (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOENOL) (W) PY  
RUVATE OR PEP) (4A) (SUPPL#### OR AVAILAB?)

FILE 'EMBASE'

3185 PHOSPHOENOLPYRUVATE

1363 "PHOSPHO"

982 "ENOL"

37 PHOSPHO ENOL

("PHOSPHO" (W) "ENOL")

137 PHOSPHOENOL

14873 PYRUVATE

1865 PEP

312126 SUPPL####

154976 AVAILAB?

L26 15 (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOENOL) (W) PY  
RUVATE OR PEP) (4A) (SUPPL#### OR AVAILAB?)

FILE 'HCAPLUS'

8227 PHOSPHOENOLPYRUVATE  
5037 PHOSPHO  
12082 ENOL  
30 PHOSPHO ENOL  
(PHOSPHO (W) ENOL)  
430 PHOSPHOENOL  
32524 PYRUVATE  
3846 PEP  
113608 SUPPL####  
208940 AVAILAB?

L27 45 (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOENOL) (W) PY  
RUVATE OR PEP) (4A) (SUPPL#### OR AVAILAB?)

FILE 'NTIS'

35 PHOSPHOENOLPYRUVATE  
37 PHOSPHO  
72 ENOL  
0 PHOSPHO ENOL  
(PHOSPHO (W) ENOL)  
5 PHOSPHOENOL  
287 PYRUVATE  
1067 PEP  
75242 SUPPL####  
196174 AVAILAB?

L28 13 (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOENOL) (W) PY  
RUVATE OR PEP) (4A) (SUPPL#### OR AVAILAB?)

FILE 'WPIDS'

56 PHOSPHOENOLPYRUVATE  
2830 PHOSPHO  
1261 ENOL  
65 PHOSPHO ENOL  
(PHOSPHO (W) ENOL)  
67 PHOSPHOENOL  
819 PYRUVATE  
182 PEP  
560814 SUPPL####  
58010 AVAILAB?

L29 1 (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOENOL) (W) PY  
RUVATE OR PEP) (4A) (SUPPL#### OR AVAILAB?)

TOTAL FOR ALL FILES

L30 153 (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOENOL) (W) P  
YRUVATE OR PEP) (4A) (SUPPL#### OR AVAILAB?)

=> s phosphotransferase# or phospho transferase#

FILE 'MEDLINE'

14543 PHOSPHOTRANSFERASE#  
1982 PHOSPHO  
25483 TRANSFERASE#  
10 PHOSPHO TRANSFERASE#  
(PHOSPHO (W) TRANSFERASE#)

L31 14548 PHOSPHOTRANSFERASE# OR PHOSPHO TRANSFERASE#

FILE 'SCISEARCH'

2867 PHOSPHOTRANSFERASE#  
1236 PHOSPHO  
18322 TRANSFERASE#  
9 PHOSPHO TRANSFERASE#  
(PHOSPHO (W) TRANSFERASE#)

L32 2874 PHOSPHOTRANSFERASE# OR PHOSPHO TRANSFERASE#

FILE 'LIFESCI'

1880 PHOSPHOTRANSFERASE#  
662 "PHOSPHO"  
6728 TRANSFERASE#  
6 PHOSPHO TRANSFERASE#  
("PHOSPHO" (W) TRANSFERASE#)

L33 1883 PHOSPHOTRANSFERASE# OR PHOSPHO TRANSFERASE#

FILE 'BIOTECHDS'

1407 PHOSPHOTRANSFERASE#  
126 PHOSPHO  
1125 TRANSFERASE#  
0 PHOSPHO TRANSFERASE#  
(PHOSPHO (W) TRANSFERASE#)

L34 1407 PHOSPHOTRANSFERASE# OR PHOSPHO TRANSFERASE#

FILE 'BIOSIS'

4463 PHOSPHOTRANSFERASE#  
54584 PHOSPHO  
50000 TRANSFERASE#  
1748 PHOSPHO TRANSFERASE#  
(PHOSPHO (W) TRANSFERASE#)

L35 5572 PHOSPHOTRANSFERASE# OR PHOSPHO TRANSFERASE#

FILE 'EMBASE'

4721 PHOSPHOTRANSFERASE#  
1363 "PHOSPHO"  
21531 TRANSFERASE#  
4 PHOSPHO TRANSFERASE#  
("PHOSPHO" (W) TRANSFERASE#)

L36 4725 PHOSPHOTRANSFERASE# OR PHOSPHO TRANSFERASE#

FILE 'HCAPLUS'  
5297 PHOSPHOTRANSFERASE#  
5037 PHOSPHO  
24394 TRANSFERASE#  
4 PHOSPHO TRANSFERASE#  
(PHOSPHO (W) TRANSFERASE#)  
L37 5301 PHOSPHOTRANSFERASE# OR PHOSPHO TRANSFERASE#

FILE 'NTIS'  
121 PHOSPHOTRANSFERASE#  
37 PHOSPHO  
548 TRANSFERASE#  
0 PHOSPHO TRANSFERASE#  
(PHOSPHO (W) TRANSFERASE#)  
L38 121 PHOSPHOTRANSFERASE# OR PHOSPHO TRANSFERASE#

FILE 'WPIDS'  
85 PHOSPHOTRANSFERASE#  
2830 PHOSPHO  
1777 TRANSFERASE#  
11 PHOSPHO TRANSFERASE#  
(PHOSPHO (W) TRANSFERASE#)  
L39 87 PHOSPHOTRANSFERASE# OR PHOSPHO TRANSFERASE#

TOTAL FOR ALL FILES  
L40 36518 PHOSPHOTRANSFERASE# OR PHOSPHO TRANSFERASE#

=> s l40 and l10

FILE 'MEDLINE'  
L41 9 L31 AND L1

FILE 'SCISEARCH'  
L42 11 L32 AND L2

FILE 'LIFESCI'  
L43 3 L33 AND L3

FILE 'BIOTECHDS'  
L44 3 L34 AND L4

FILE 'BIOSIS'  
L45 8 L35 AND L5

FILE 'EMBASE'  
L46 5 L36 AND L6

FILE 'HCAPLUS'

L47 6 L37 AND L7

FILE 'NTIS'

L48 1 L38 AND L8

FILE 'WPIDS'

L49 1 L39 AND L9

TOTAL FOR ALL FILES

L50 47 L40 AND L10

=> s 140(8a)(delet? or inactivat?)

FILE 'MEDLINE'

59349 DELET?

59748 INACTIVAT?

L51 94 L31(8A) (DELET? OR INACTIVAT?)

FILE 'SCISEARCH'

42508 DELET?

39181 INACTIVAT?

L52 37 L32(8A) (DELET? OR INACTIVAT?)

FILE 'LIFESCI'

26496 DELET?

21480 INACTIVAT?

L53 51 L33(8A) (DELET? OR INACTIVAT?)

FILE 'BIOTECHDS'

5470 DELET?

4595 INACTIVAT?

L54 38 L34(8A) (DELET? OR INACTIVAT?)

FILE 'BIOSIS'

59158 DELET?

68865 INACTIVAT?

L55 95 L35(8A) (DELET? OR INACTIVAT?)

FILE 'EMBASE'

50023 DELET?

52972 INACTIVAT?

L56 63 L36(8A) (DELET? OR INACTIVAT?)

FILE 'HCAPLUS'

54612 DELET?

78998 INACTIVAT?

L57 120 L37(8A) (DELET? OR INACTIVAT?)

FILE 'NTIS'

3738 DELET?

1794 INACTIVAT?

L58 0 L38(8A) (DELET? OR INACTIVAT?)

FILE 'WPIDS'

7598 DELET?

6426 INACTIVAT?

L59 3 L39(8A) (DELET? OR INACTIVAT?)

TOTAL FOR ALL FILES

L60 501 L40(8A) (DELET? OR INACTIVAT?)

=> s l60 and transport?

FILE 'MEDLINE'

160802 TRANSPORT?

L61 9 L51 AND TRANSPORT?

FILE 'SCISEARCH'

195868 TRANSPORT?

L62 1 L52 AND TRANSPORT?

FILE 'LIFESCI'

43010 TRANSPORT?

L63 2 L53 AND TRANSPORT?

FILE 'BIOTECHDS'

2646 TRANSPORT?

L64 1 L54 AND TRANSPORT?

FILE 'BIOSIS'

181887 TRANSPORT?

L65 10 L55 AND TRANSPORT?

FILE 'EMBASE'

148929 TRANSPORT?

L66 9 L56 AND TRANSPORT?

FILE 'HCAPLUS'

394572 TRANSPORT?

L67 16 L57 AND TRANSPORT?

FILE 'NTIS'

114593 TRANSPORT?

L68 0 L58 AND TRANSPORT?

FILE 'WPIDS'

171127 TRANSPORT?

L69 0 L59 AND TRANSPORT?

TOTAL FOR ALL FILES

L70 48 L60 AND TRANSPORT?

=> s 140 and glucose

FILE 'MEDLINE'

176697 GLUCOSE

L71 1739 L31 AND GLUCOSE

FILE 'SCISEARCH'

94684 GLUCOSE

L72 477 L32 AND GLUCOSE

FILE 'LIFESCI'

27021 GLUCOSE

L73 321 L33 AND GLUCOSE

FILE 'BIOTECHDS'

21329 GLUCOSE

L74 67 L34 AND GLUCOSE

FILE 'BIOSIS'

186218 GLUCOSE

L75 938 L35 AND GLUCOSE

FILE 'EMBASE'

140796 GLUCOSE

L76 667 L36 AND GLUCOSE

FILE 'HCAPLUS'

210996 GLUCOSE

L77 1018 L37 AND GLUCOSE

FILE 'NTIS'

2689 GLUCOSE

L78 8 L38 AND GLUCOSE

FILE 'WPIDS'

17490 GLUCOSE

L79 9 L39 AND GLUCOSE



TOTAL FOR ALL FILES  
L80 5244 L40 AND GLUCOSE

=> s l60 and l80

FILE 'MEDLINE'  
L81 15 L51 AND L71

FILE 'SCISEARCH'  
L82 3 L52 AND L72

FILE 'LIFESCI'  
L83 4 L53 AND L73

FILE 'BIOTECHDS'  
L84 4 L54 AND L74

FILE 'BIOSIS'  
L85 14 L55 AND L75

FILE 'EMBASE'  
L86 13 L56 AND L76

FILE 'HCAPLUS'  
L87 16 L57 AND L77

FILE 'NTIS'  
L88 0 L58 AND L78

FILE 'WPIDS'  
L89 1 L59 AND L79

TOTAL FOR ALL FILES  
L90 70 L60 AND L80

=> s l80 and transport

FILE 'MEDLINE'  
138627 TRANSPORT  
L91 495 L71 AND TRANSPORT

FILE 'SCISEARCH'  
176564 TRANSPORT  
L92 208 L72 AND TRANSPORT

FILE 'LIFESCI'

36010 TRANSPORT  
L93 128 L73 AND TRANSPORT

FILE 'BIOTECHDS'  
2105 TRANSPORT  
L94 11 L74 AND TRANSPORT

FILE 'BIOSIS'  
162087 TRANSPORT  
L95 308 L75 AND TRANSPORT

FILE 'EMBASE'  
136056 TRANSPORT  
L96 290 L76 AND TRANSPORT

FILE 'HCAPLUS'  
358331 TRANSPORT  
L97 417 L77 AND TRANSPORT

FILE 'NTIS'  
68131 TRANSPORT  
L98 3 L78 AND TRANSPORT

FILE 'WPIDS'  
114273 TRANSPORT  
L99 1 L79 AND TRANSPORT

TOTAL FOR ALL FILES  
L100 1861 L80 AND TRANSPORT

=> s l100 and (phosphoenolpyruvate or (phospho enol or phosphoenol) (w)pyruvate  
or pep)

FILE 'MEDLINE'  
4806 PHOSPHOENOLPYRUVATE  
1982 PHOSPHO  
461 ENOL  
47 PHOSPHO ENOL  
(PHOSPHO (W) ENOL)  
183 PHOSPHOENOL  
18255 PYRUVATE  
200 (PHOSPHO ENOL OR PHOSPHOENOL) (W) PYRUVATE  
2045 PEP  
L101 259 L91 AND (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOEN  
OL) (W) PYRUVATE OR PEP)

FILE 'SCISEARCH'

3693 PHOSPHOENOLPYRUVATE  
1236 PHOSPHO  
4129 ENOL  
38 PHOSPHO ENOL  
(PHOSPHO (W) ENOL)  
150 PHOSPHOENOL  
11650 PYRUVATE  
173 (PHOSPHO ENOL OR PHOSPHOENOL) (W) PYRUVATE  
1379 PEP  
L102 139 L92 AND (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOEN  
OL) (W) PYRUVATE OR PEP)

FILE 'LIFESCI'

1429 PHOSPHOENOLPYRUVATE  
662 "PHOSPHO"  
171 "ENOL"  
13 PHOSPHO ENOL  
( "PHOSPHO" (W) "ENOL" )  
90 PHOSPHOENOL  
3941 PYRUVATE  
94 (PHOSPHO ENOL OR PHOSPHOENOL) (W) PYRUVATE  
538 PEP  
L103 93 L93 AND (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOEN  
OL) (W) PYRUVATE OR PEP)

FILE 'BIOTECHDS'

234 PHOSPHOENOLPYRUVATE  
126 PHOSPHO  
104 ENOL  
2 PHOSPHO ENOL  
(PHOSPHO (W) ENOL)  
30 PHOSPHOENOL  
1121 PYRUVATE  
30 (PHOSPHO ENOL OR PHOSPHOENOL) (W) PYRUVATE  
112 PEP  
L104 6 L94 AND (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOEN  
OL) (W) PYRUVATE OR PEP)

FILE 'BIOSIS'

5803 PHOSPHOENOLPYRUVATE  
54584 PHOSPHO  
1611 ENOL  
137 PHOSPHO ENOL  
(PHOSPHO (W) ENOL)  
3552 PHOSPHOENOL  
28426 PYRUVATE  
3629 (PHOSPHO ENOL OR PHOSPHOENOL) (W) PYRUVATE

2775 PEP  
L105 205 L95 AND (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOEN  
OL) (W) PYRUVATE OR PEP)

FILE 'EMBASE'

3185 PHOSPHOENOLPYRUVATE  
1363 "PHOSPHO"  
982 "ENOL"  
37 PHOSPHO ENOL  
("PHOSPHO" (W) "ENOL")  
137 PHOSPHOENOL  
14873 PYRUVATE  
159 (PHOSPHO ENOL OR PHOSPHOENOL) (W) PYRUVATE  
1865 PEP  
L106 188 L96 AND (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOEN  
OL) (W) PYRUVATE OR PEP)

FILE 'HCAPLUS'

8227 PHOSPHOENOLPYRUVATE  
5037 PHOSPHO  
12082 ENOL  
30 PHOSPHO ENOL  
(PHOSPHO (W) ENOL)  
430 PHOSPHOENOL  
32524 PYRUVATE  
402 (PHOSPHO ENOL OR PHOSPHOENOL) (W) PYRUVATE  
3846 PEP  
L107 308 L97 AND (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOEN  
OL) (W) PYRUVATE OR PEP)

FILE 'NTIS'

35 PHOSPHOENOLPYRUVATE  
37 PHOSPHO  
72 ENOL  
0 PHOSPHO ENOL  
(PHOSPHO (W) ENOL)  
5 PHOSPHOENOL  
287 PYRUVATE  
3 (PHOSPHO ENOL OR PHOSPHOENOL) (W) PYRUVATE  
1067 PEP  
L108 3 L98 AND (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOEN  
OL) (W) PYRUVATE OR PEP)

FILE 'WPIDS'

56 PHOSPHOENOLPYRUVATE  
2830 PHOSPHO  
1261 ENOL

65 PHOSPHO ENOL  
    (PHOSPHO (W) ENOL)  
67 PHOSPHOENOL  
819 PYRUVATE  
72 (PHOSPHO ENOL OR PHOSPHOENOL) (W) PYRUVATE  
182 PEP

L109 1 L99 AND (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOENOL) (W) PYRUVATE OR PEP)

TOTAL FOR ALL FILES

L110 1202 L100 AND (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOENOL) (W) PYRUVATE OR PEP)

=> s l110 and mut/q

FILE 'MEDLINE'

L111 159 L101 AND MUT/Q

FILE 'SCISEARCH'

L112 81 L102 AND MUT/Q

FILE 'LIFESCI'

L113 46 L103 AND MUT/Q

FILE 'BIOTECHDS'

L114 4 L104 AND MUT/Q

FILE 'BIOSIS'

L115 114 L105 AND MUT/Q

FILE 'EMBASE'

L116 100 L106 AND MUT/Q

FILE 'HCAPLUS'

L117 157 L107 AND MUT/Q

FILE 'NTIS'

L118 2 L108 AND MUT/Q

FILE 'WPIDS'

L119 1 L109 AND MUT/Q

TOTAL FOR ALL FILES

L120 664 L110 AND MUT/Q

=> s l110 and l120

FILE 'MEDLINE'  
L121 159 L101 AND L111

FILE 'SCISEARCH'  
L122 81 L102 AND L112

FILE 'LIFESCI'  
L123 46 L103 AND L113

FILE 'BIOTECHDS'  
L124 4 L104 AND L114

FILE 'BIOSIS'  
L125 114 L105 AND L115

FILE 'EMBASE'  
L126 100 L106 AND L116

FILE 'HCAPLUS'  
L127 157 L107 AND L117

FILE 'NTIS'  
L128 2 L108 AND L118

FILE 'WPIDS'  
L129 1 L109 AND L119

TOTAL FOR ALL FILES  
L130 664 L110 AND L120

=> s l120 and (aromatic or shikimate)

FILE 'MEDLINE'  
15712 AROMATIC  
232 SHIKIMATE  
L131 1 L111 AND (AROMATIC OR SHIKIMATE)

FILE 'SCISEARCH'  
48523 AROMATIC  
470 SHIKIMATE  
L132 2 L112 AND (AROMATIC OR SHIKIMATE)

FILE 'LIFESCI'  
7727 AROMATIC  
177 SHIKIMATE  
L133 2 L113 AND (AROMATIC OR SHIKIMATE)

FILE 'BIOTECHDS'  
3307 AROMATIC  
75 SHIKIMATE  
L134 1 L114 AND (AROMATIC OR SHIKIMATE)

FILE 'BIOSIS'  
29750 AROMATIC  
820 SHIKIMATE  
L135 2 L115 AND (AROMATIC OR SHIKIMATE)

FILE 'EMBASE'  
23540 AROMATIC  
192 SHIKIMATE  
L136 2 L116 AND (AROMATIC OR SHIKIMATE)

FILE 'HCAPLUS'  
108138 AROMATIC  
1189 SHIKIMATE  
L137 3 L117 AND (AROMATIC OR SHIKIMATE)

FILE 'NTIS'  
10267 AROMATIC  
8 SHIKIMATE  
L138 0 L118 AND (AROMATIC OR SHIKIMATE)

FILE 'WPIDS'  
126387 AROMATIC  
23 SHIKIMATE  
L139 1 L119 AND (AROMATIC OR SHIKIMATE)

TOTAL FOR ALL FILES  
L140 14 L120 AND (AROMATIC OR SHIKIMATE)

=> s 120 and (phosphoenolpyruvate or (phospho enol or phosphoenol) (w)pyruvate or pep)

FILE 'MEDLINE'  
4806 PHOSPHOENOLPYRUVATE  
1982 PHOSPHO  
461 ENOL  
47 PHOSPHO ENOL  
(PHOSPHO (W) ENOL)  
183 PHOSPHOENOL  
18255 PYRUVATE  
200 (PHOSPHO ENOL OR PHOSPHOENOL) (W) PYRUVATE  
2045 PEP  
L141 4 L11 AND (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOEN

OL) (W) PYRUVATE OR PEP)

FILE 'SCISEARCH'

3693 PHOSPHOENOLPYRUVATE.  
1236 PHOSPHO  
4129 ENOL  
38 PHOSPHO ENOL  
(PHOSPHO (W) ENOL)  
150 PHOSPHOENOL  
11650 PYRUVATE  
173 (PHOSPHO ENOL OR PHOSPHOENOL) (W) PYRUVATE  
1379 PEP

L142 5 L12 AND (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOENOL) (W) PYRUVATE OR PEP)

FILE 'LIFESCI'

1429 PHOSPHOENOLPYRUVATE  
662 "PHOSPHO"  
171 "ENOL"  
13 PHOSPHO ENOL  
( "PHOSPHO" (W) "ENOL" )  
90 PHOSPHOENOL  
3941 PYRUVATE  
94 (PHOSPHO ENOL OR PHOSPHOENOL) (W) PYRUVATE  
538 PEP

L143 4 L13 AND (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOENOL) (W) PYRUVATE OR PEP)

FILE 'BIOTECHDS'

234 PHOSPHOENOLPYRUVATE  
126 PHOSPHO  
104 ENOL  
2 PHOSPHO ENOL  
(PHOSPHO (W) ENOL)  
30 PHOSPHOENOL  
1121 PYRUVATE  
30 (PHOSPHO ENOL OR PHOSPHOENOL) (W) PYRUVATE  
112 PEP

L144 3 L14 AND (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOENOL) (W) PYRUVATE OR PEP)

FILE 'BIOSIS'

5803 PHOSPHOENOLPYRUVATE  
54584 PHOSPHO  
1611 ENOL  
137 PHOSPHO ENOL  
(PHOSPHO (W) ENOL)



3552 PHOSPHOENOL  
28426 PYRUVATE  
3629 (PHOSPHO ENOL OR PHOSPHOENOL) (W) PYRUVATE  
2775 PEP  
L145 10 L15 AND (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOEN  
OL) (W) PYRUVATE OR PEP)

FILE 'EMBASE'

3185 PHOSPHOENOLPYRUVATE  
1363 "PHOSPHO"  
982 "ENOL"  
37 PHOSPHO ENOL  
("PHOSPHO" (W) "ENOL")  
137 PHOSPHOENOL  
14873 PYRUVATE  
159 (PHOSPHO ENOL OR PHOSPHOENOL) (W) PYRUVATE  
1865 PEP  
L146 4 L16 AND (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOEN  
OL) (W) PYRUVATE OR PEP)

FILE 'HCAPLUS'

8227 PHOSPHOENOLPYRUVATE  
5037 PHOSPHO  
12082 ENOL  
30 PHOSPHO ENOL  
(PHOSPHO (W) ENOL)  
430 PHOSPHOENOL  
32524 PYRUVATE  
402 (PHOSPHO ENOL OR PHOSPHOENOL) (W) PYRUVATE  
3846 PEP  
L147 10 L17 AND (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOEN  
OL) (W) PYRUVATE OR PEP)

FILE 'NTIS'

35 PHOSPHOENOLPYRUVATE  
37 PHOSPHO  
72 ENOL  
0 PHOSPHO ENOL  
(PHOSPHO (W) ENOL)  
5 PHOSPHOENOL  
287 PYRUVATE  
3 (PHOSPHO ENOL OR PHOSPHOENOL) (W) PYRUVATE  
1067 PEP  
L148 0 L18 AND (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOEN  
OL) (W) PYRUVATE OR PEP)

FILE 'WPIDS'

56 PHOSPHOENOLPYRUVATE  
 2830 PHOSPHO  
 1261 ENOL  
 65 PHOSPHO ENOL  
 (PHOSPHO (W) ENOL)  
 67 PHOSPHOENOL  
 819 PYRUVATE  
 72 (PHOSPHO ENOL OR PHOSPHOENOL) (W) PYRUVATE  
 182 PEP  
 L149 2 L19 AND (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOEN  
 OL) (W) PYRUVATE OR PEP)

TOTAL FOR ALL FILES

L150 42 L20 AND (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOEN  
 OL) (W) PYRUVATE OR PEP)

=> s l20 and glucose

FILE 'MEDLINE'

176697 GLUCOSE  
 L151 18 L11 AND GLUCOSE

FILE 'SCISEARCH'

94684 GLUCOSE  
 L152 12 L12 AND GLUCOSE

FILE 'LIFESCI'

27021 GLUCOSE  
 L153 7 L13 AND GLUCOSE

FILE 'BIOTECHDS'

21329 GLUCOSE  
 L154 10 L14 AND GLUCOSE

FILE 'BIOSIS'

186218 GLUCOSE  
 L155 22 L15 AND GLUCOSE

FILE 'EMBASE'

140796 GLUCOSE  
 L156 21 L16 AND GLUCOSE

FILE 'HCAPLUS'

210996 GLUCOSE  
 L157 16 L17 AND GLUCOSE

FILE 'NTIS'

2689 GLUCOSE  
L158 0 L18 AND GLUCOSE

FILE 'WPIDS'  
17490 GLUCOSE  
L159 2 L19 AND GLUCOSE

TOTAL FOR ALL FILES  
L160 108 L20 AND GLUCOSE

=> s (l30 or l50 or l70 or l90 or l130 or l140 or l150 or l160) and py=<1995  
range=1996,

FILE 'MEDLINE'  
194043 PY=<1995  
L161 4 (L21 OR L41 OR L61 OR L81 OR L121 OR L131 OR L141 OR L151)  
AND PY=<1995

FILE 'SCISEARCH'  
111295 PY=<1995  
L162 0 (L22 OR L42 OR L62 OR L82 OR L122 OR L132 OR L142 OR L152)  
AND PY=<1995

FILE 'LIFESCI'  
65559 PY=<1995  
L163 5 (L23 OR L43 OR L63 OR L83 OR L123 OR L133 OR L143 OR L153)  
AND PY=<1995

FILE 'BIOTECHDS'  
4521 PY=<1995  
(PY=<1995)  
L164 3 (L24 OR L44 OR L64 OR L84 OR L124 OR L134 OR L144 OR L154)  
AND PY=<1995

FILE 'BIOSIS'  
156926 PY=<1995  
L165 2 (L25 OR L45 OR L65 OR L85 OR L125 OR L135 OR L145 OR L155)  
AND PY=<1995

FILE 'EMBASE'  
38688 PY=<1995  
L166 3 (L26 OR L46 OR L66 OR L86 OR L126 OR L136 OR L146 OR L156)  
AND PY=<1995

FILE 'HCAPLUS'  
178173 PY=<1995  
L167 0 (L27 OR L47 OR L67 OR L87 OR L127 OR L137 OR L147 OR L157)

AND PY=<1995

FILE 'NTIS'

55706 PY=<1995

L168 0 (L28 OR L48 OR L68 OR L88 OR L128 OR L138 OR L148 OR L158)  
AND PY=<1995

FILE 'WPIDS'

114525 PY=<1995

(PY=<1995)

L169 0 (L29 OR L49 OR L69 OR L89 OR L129 OR L139 OR L149 OR L159)  
AND PY=<1995

TOTAL FOR ALL FILES

L170 17 (L30 OR L50 OR L70 OR L90 OR L130 OR L140 OR L150 OR L160)  
AND PY=<1995

=> d 1-

d 1-

=> d 1-

L170 ANSWER 1 OF 17 MEDLINE

TI Regulation of the lactose \*\*\*phosphotransferase\*\*\* system of  
Streptococcus bovis by \*\*\*glucose\*\*\* : independence of inducer  
exclusion and expulsion mechanisms.

SO MICROBIOLOGY, \*\*\* (1995 Sep) \*\*\* 141 ( Pt 9) 2261-9.  
Journal code: BXW. ISSN: 1350-0872.

AU Cook G M; Kearns D B; Russell J B; Reizer J; Saier M H Jr

AN 96118707 MEDLINE

L170 ANSWER 2 OF 17 MEDLINE

TI Triiodothyronine treatment increases substrate cycling between  
pyruvate carboxylase and malic enzyme in perfused rat liver.

SO METABOLISM: CLINICAL AND EXPERIMENTAL, \*\*\* (1995 Nov) \*\*\* 44 (11)  
1380-3.

Journal code: MUM. ISSN: 0026-0495.

AU Petersen K F; Blair J B; Shulman G I

AN 96067411 MEDLINE

L170 ANSWER 3 OF 17 MEDLINE

TI \*\*\*Glucose\*\*\* kinase-dependent catabolite repression in  
Staphylococcus xylosus.

SO JOURNAL OF BACTERIOLOGY, \*\*\* (1995 Nov) \*\*\* 177 (21) 6144-52.  
Journal code: HH3. ISSN: 0021-9193.

AU Wagner E; Marcandier S; Egeter O; Deutscher J; Gotz F; Bruckner R

AN 96042090 MEDLINE

L170 ANSWER 4 OF 17 MEDLINE

TI Regulation of sugar \*\*\*transport\*\*\* via the multiple sugar metabolism operon of Streptococcus \*\*\*mutans\*\*\* by the \*\*\*phosphoenolpyruvate\*\*\* \*\*\*phosphotransferase\*\*\* system.

SO JOURNAL OF BACTERIOLOGY, \*\*\* (1995 Oct) \*\*\* 177 (19) 5704-6.  
Journal code: HH3. ISSN: 0021-9193.

AU Cvitkovitch D G; Boyd D A; Hamilton I R

AN 96032411 MEDLINE

L170 ANSWER 5 OF 17 LIFESCI COPYRIGHT 1997 CSA

TI The influence of ozone and nutrition on delta super(13)C in Betula pendula

SO OECOLOGIA, ( \*\*\*1995\*\*\* ) vol. 103, no. 4, pp. 397-406.  
ISSN: 0029-8549.

AU Saurer, M.; Maurer, S.; Matyssek, R.\*; Landolt, W.;  
Guenthardt-Goerg, M.S.; Siegenthaler, U.

AN 97:18770 LIFESCI

L170 ANSWER 6 OF 17 LIFESCI COPYRIGHT 1997 CSA

TI Inorganic phosphate (Pi) enhancement of dark respiration in the Pi-limited green alga Selenastrum minutum. Interactions between H super(+)/Pi cotransport, the plasmalemma H super(+)-ATPase, and dark respiratory carbon flow

SO PLANT PHYSIOL., ( \*\*\*1994\*\*\* ) vol. 104, no. 2, pp. 624-637.  
ISSN: 0032-0889.

AU Gauthier, D.A.; Turpin, D.H.\*

AN 97:7446 LIFESCI

L170 ANSWER 7 OF 17 LIFESCI COPYRIGHT 1997 CSA

TI How neutral red \*\*\*modified\*\*\* \*\*\*carbon\*\*\* and electron \*\*\*flow\*\*\* in Clostridium acetobutylicum grown in chemostat culture at neutral pH

SO FEMS MICROBIOL. REV., ( \*\*\*1995\*\*\* ) vol. 16, no. 2-3, pp. 151-162.  
ISSN: 0168-6445.

AU Girbal, L.; Vasconcelos, I.; Saint-Amans, S.; Soucaille, P.\*

AN 96:108681 LIFESCI

L170 ANSWER 8 OF 17 LIFESCI COPYRIGHT 1997 CSA

TI Use of feedback-resistant threonine dehydratases of Corynebacterium glutamicum to \*\*\*increase\*\*\* \*\*\*carbon\*\*\* \*\*\*flux\*\*\* towards L-isoleucine

SO APPL. ENVIRON. MICROBIOL., ( \*\*\*1995\*\*\* ) vol. 61, no. 12, pp. 4315-4320.  
ISSN: 0099-2240.

AU Morbach, S.; Sahm, H.; Eggeling, L.\*

AN 96:41140 LIFESCI

L170 ANSWER 9 OF 17 LIFESCI COPYRIGHT 1997 CSA

TI \*\*\*Glucose\*\*\* kinase-dependent catabolite repression in  
Staphylococcus xylosus

SO J. BACTERIOL., ( \*\*\*1995\*\*\* ) vol. 177, no. 21, pp. 6144-6152.  
ISSN: 0021-9193.

AU Wagner, E.; Marcandier, S.; Egeter, O.; Deutscher, J.; Goetz, F.;  
Brueckner, R.\*

AN 96:13411 LIFESCI

L170 ANSWER 10 OF 17 BIOTECHDS COPYRIGHT 1997 DERWENT INFORMATION LTD

TI How neutral red \*\*\*modified\*\*\* \*\*\*carbon\*\*\* and electron  
\*\*\*flow\*\*\* in Clostridium acetobutylicum grown in chemostat  
culture at neutral pH;

NADH production; a review (conference paper)

SO FEMS Microbiol.Rev.; ( \*\*\*1995\*\*\* ) 16, 2-3, 151-62  
CODEN: FMREE4 ISSN: 0168-6445

Beyond 2000-Chemicals from Biotechnology-Ecological Challenge and  
Economic Constraints, Hannover, Germany, 18-20 October, 1993.

AU Girbal L; Vasconcelos I; Saint-Adams S; \*Soucaille P

AN 96-01938 BIOTECHDS

L170 ANSWER 11 OF 17 BIOTECHDS COPYRIGHT 1997 DERWENT INFORMATION LTD

TI Deviation of \*\*\*carbon\*\*\* \*\*\*flux\*\*\* from ethanol towards  
\*\*\*alternative\*\*\* electron acceptors in engineered Saccharomyces  
cerevisiae yeast strains;

metabolic engineering; Lactobacillus casei lactate-dehydrogenase  
and glycerol-dehydrogenase overexpression (conference abstract)

SO Yeast; ( \*\*\*1995\*\*\* ) 11, Spec.Iss., S537

CODEN: YESTE3 ISSN: 0749-503X

17th International Conference on Yeast Genetics and Molecular  
Biology, Lisbon, Portugal, 10-16 June, 1995.

AU Dequin S; Michnick S; Roustan J L; Barre P

AN 96-01731 BIOTECHDS

L170 ANSWER 12 OF 17 BIOTECHDS COPYRIGHT 1997 DERWENT INFORMATION LTD

TI Use of feedback-resistant threonine-dehydratases of Corynebacterium  
glutamicum to \*\*\*increase\*\*\* \*\*\*carbon\*\*\* \*\*\*flux\*\*\*  
towards L-isoleucine;

metabolic flux through the homoserine-dehydrogenase reaction;

metabolic engineering and effect of plasmid copy number

SO Appl.Environ.Microbiol.; ( \*\*\*1995\*\*\* ) 61, 12, 4315-20

CODEN: AEMIDF ISSN: 0099-2240

AU Morbach S; Sahm H; \*Eggeling L

AN 96-00356 BIOTECHDS

L170 ANSWER 13 OF 17 BIOSIS COPYRIGHT 1997 BIOSIS

TI Influence of nitrogen nutrition on chloroplast structure, RuBisCo and PEP-case from corn.

SO Boletim da Sociedade Broteriana 66 (2). 1993-1994. 323-342. ISSN: 0081-0657

AU Santos A; Santos I; Almeida J M; Salema R

AN 96:194016 BIOSIS

L170 ANSWER 14 OF 17 BIOSIS COPYRIGHT 1997 BIOSIS

TI Use of feedback-resistant threonine dehydratases of Corynebacterium glutamicum to \*\*\*increase\*\*\* \*\*\*carbon\*\*\* \*\*\*flux\*\*\* towards L-isoleucine.

SO Applied and Environmental Microbiology 61 (12). 1995. 4315-4320. ISSN: 0099-2240

AU Morbach S; Sahm H; Eggeling L

AN 96:34666 BIOSIS

L170 ANSWER 15 OF 17 EMBASE COPYRIGHT 1997 ELSEVIER SCI. B.V.

TI Triiodothyronine treatment increases substrate cycling between pyruvate carboxylase and malic enzyme in perfused rat liver.

SO Metabolism: Clinical and Experimental, ( \*\*\*1995\*\*\* ) 44/11 (1380-1383).

ISSN: 0026-0495 CODEN: META AJ

AU Petersen K.F.; Blair J.B.; Shulman G.I.

AN 96087228 EMBASE

L170 ANSWER 16 OF 17 EMBASE COPYRIGHT 1997 ELSEVIER SCI. B.V.

TI Regulation of sugar \*\*\*transport\*\*\* via the multiple sugar metabolism operon of Streptococcus \*\*\*mutans\*\*\* by the \*\*\*phosphoenolpyruvate\*\*\* \*\*\*phosphotransferase\*\*\* system.

SO Journal of Bacteriology, ( \*\*\*1995\*\*\* ) 177/19 (5704-5706). ISSN: 0021-9193 CODEN: JOBAAY

AU Cvitkovitch D.G.; Boyd D.A.; Hamilton I.R.

AN 96032768 EMBASE

L170 ANSWER 17 OF 17 EMBASE COPYRIGHT 1997 ELSEVIER SCI. B.V.

TI Alteration of the biochemical valves in the central metabolism of escherichia coli.

SO Annals of the New York Academy of Sciences, ( \*\*\*1994\*\*\* ) 745 (21-34).

ISSN: 0077-8923 CODEN: ANYAA

AU Liao J.C.; Chao Y.-P.; Patnaik R.

AN 96009351 EMBASE

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